



INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
PTO-1449

ATTY. DOCKET NO.
13101/46003

SERIAL NO.
08/284,199

APPLICANT
Michael M. Burrell

FILING DATE
August 2, 1994

GROUP ART UNIT
1638

U. S. PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER		PATENT DATE	NAME	CLASS	SUBCLASS	FILING DATE
DMC	1	4,696,674	September 29, 1987	Cipar			—
	2	4,801,540	January 31, 1989	Hiatt et al.			—
	3	4,940,835	July 10, 1990	Shah et al.			—
	4	4,971,908	November 20, 1990	Kishore et al.			—
	5	5,387,756	February 7, 1995	Burrell et al.			12/17/1990
	6	5,498,830	March 12, 1996	Barry et al.			06/18/1990
	7	5,608,149	March 4, 1997	Barry et al.			06/18/1990
	8	5,608,150	March 4, 1997	Conner			03/20/1995
	9	5,648,249	July 15, 1997	Barry et al.			03/20/1995
	10	5,658,773	August 19, 1997	Bennett et al.			10/07/1991
	11	6,489,539	December 3, 2002	Burrell			12/17/1990
	12	6,538,178	March 25, 2003	Kishore			06/18/1990
✓	13	6,538,179	March 25, 2003	Barry et al.			06/18/1990

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
DMC	14 EP-0 120 551-A2	October 3, 1984	EP				
	15 EP-0 218 571-A2	April 15, 1987	EP				
	16 EP-0 368 506-A2	May 16, 1990	EP				
	17 EP-0 455 316-A2	November 6, 1991	EP				
	18 EP-0 466 995-A2	January 22, 1992	EP				
	19 DE-41 24 537-A1	February 6, 1992	DE				
	20 JP-5-153981	June 22, 1993	JP				
	21 JP-6-90767	April 5, 1994	JP				
	22 EP-0 634 491-A1	January 18, 1995	EP				
	23 EP-0 654 531-A1	May 24, 1995	EP				
	24 JP-7-227286	August 29, 1995	JP				
	25 EP-0 779 363-A2	June 18, 1997	EP				
	26 WO 91/04036	April 4, 1991	PCT				
	27 WO 91/19806	December 26, 1991	PCT				
	28 WO 92/01782	February 6, 1992	PCT				
	29 WO 92/11375	July 9, 1992	PCT				
	30 WO 92/11376	July 9, 1992	PCT				
✓	31 WO 92/14827	September 3, 1992	PCT				

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
D	32	WO 94/00563	January 6, 1994	PCT			
	33	WO 94/28146	December 8, 1994	PCT			
	34	WO 94/28149	December 8, 1994	PCT			
	35	WO 94/24292	October 27, 1994	PCT			
	36	WO 95/05457	February 23, 1995	PCT			
	37	WO 95/34660	December 21, 1995	PCT			
	38	WO 96/15248	May 23, 1996	PCT			
	39	WO 96/21738	July 18, 1996	PCT			
	40	WO 97/15678	May 1, 1997	PCT			
	41	WO 97/20936	June 12, 1997	PCT			
↓	42	WO 97/26362	July 24, 1997	PCT			

OTHER DOCUMENTS

EXAMINER INITIAL	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.	
DJF	43	Anderson et al., 1990, Vayda & Park (eds) "Enhancing Carbon Flow into Starch: the Role of ADPglucose Pyrophosphorylase" The Molecular Biology of the Potato, C.A.B. International, Wallingford, pp. 159-180.
	44	Baecker et al., 1983, "Biosynthesis of Bacterial Glycogen" The Journal of Biol.Chem. 258(8):5084-5088.
	45	Ball et al., 1991, "A <i>Chlamydomonas reinhardtii</i> low-starch mutant is defective for 3-phosphoglycerate activation and orthophosphate inhibition of ADP-glucose pyrophosphorylase" Planta 185:17-26.
	46	Caspar et al., 1985, "Alterations in Growth, Photosynthesis, and Respiration in a Starchless Mutant of <i>Arabidopsis thaliana</i> (L.) Deficient in Chloroplast Phosphoglucomutase Activity" Plant Physiol 79:11-17.
	47	Chang et al., 1985, "Gene Expression from Both Intronless and Intron-Containing Rous Sarcoma Viral Clones Is Specifically Inhibited by Anti-Sense RNA" Mol. Cell. Biol. 5(9):2341-2348
	48	de Fekete, 1968, "The Role of Phosphorylase in Starch Metabolism in Plasmids" Planta 208-221.
	49	Dickinson et al., 1969, "Presence of ADP-Glucose Phosphorylase in Shrunken-2 and Brittle-2 Mutants of Maize Endosperm" Plant Physiol, 44:1058-1062.
	50	Fredeen et al., 1989, "Influence Of Phosphorus Nutrition On Growth And Carbon Partitioning In Glycine Max" Plant Physiol 89:225-230.
	51	Ghosh et al., 1966, "Adenosine Diphosphate Glucose Phosphorylase" J. Biol. Chem., 241 (19):4491-4504.
	52	Hawker et al., 1979, "Starch Synthesis in Developing Potato Tubers" Physiol. Plant 46:25-30.
	53	Hnilo et al., 1989, "Mannose Feeding and Its Effect on Starch Synthesis in Developing Potato Tuber Discs" Plant Cell Physiol 30(7):1007-1010.
	54	Iglesias et al., 1993, "Expression of the Potato Tuber ADP-glucose Pyrophosphorylase in <i>Escherichia coli</i> ," The Journal of Biological Chemistry, 268(2):1081-1086.
	55	John, 1992, John Wiley & Sons (eds) Biosynthesis of the Major Group Products pp. 33-54
	56	Kleinkopf et al., 1987, "Specific Gravity of Russet Burbank Potatoes" American Potato Journal 64:579-587
	57	Koßmann et al., 1991, "Cloning and Expression Analysis of a Potato cDNA That Encodes Branching Enzyme: Evidence for Co-Expression of Starch Biocytinase Genes" Mol Gen Genet 230:239.
↓	58	Kruckeberg et al., 1989, "Decreased-Activity Mutants of Phosphoglucose Isomerase in the Cytosol and Chloroplast of <i>Clarkia xanthia</i> " 261:457-467.

Dec 27 1995

EXAMINER INITIAL	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.	
	59	Kumar et al., 1986, "Biosynthesis of Bacterial Glycogen" <i>J. Biol. Chem.</i> 264:10464-10471.
	60	Leung et al., 1986, "Cloning and Expression of the <i>Escherichia coli</i> <i>glg C</i> Gene from a Mutant Containing an ADPglucose Pyrophosphorylase with Altered Allosteric Properties" <i>Journal of Bacteriology</i> , 82-88.
	61	Meyer et al., 1993, "A Cloning, Expression, and Sequence of an Allosteric Mutant ADPglucose Pyrophosphorylase from <i>Escherichia coli</i> " <i>Arch. Bioch. Biophys.</i> 302(1):64-71.
	62	Morell et al., 1987, "Biochemistry and Molecular Biology of Starch Synthesis" <i>Plant Gene Systems and Their Biology</i> , 227-242
	63	Müller-Röber, 1990, "One of two different ADP-glucose pyrophosphorylase genes from potato responds strongly to elevated levels of sucrose" <i>Mol. Gen. Genet.</i> 224:136-146.
	64	Müller-Röber et al., 1994, "Approaches to Influence Starch Quantity and Starch Quality in Transgenic Plants" <i>Plant, Cell and Environment</i> 17:601-613.
	65	Nakata et al., 1991, "Comparison of the Primary Sequences of Two Potato Tuber ADP-glucose Pyrophosphorylase Subunits," <i>Plant Molecular Biology</i> , 17:1089-1093.
	66	Olive et al., 1989, "Isolation and nucleotide sequence of cDNA clones encoding ADP-glucose pyrophosphorylase polypeptides from wheat leaf and endosperm" <i>Plant Mol. Biol.</i> 12:525-538.
	67	Pollan, 1998, "Fried, Mashed or Zapped With DNA?" <i>The New York Times Magazine</i> , section 6 44-83
	68	Preiss and Levi, 1980, "Starch Biosynthesis and Degradation" <i>The Biochem. of Plants</i> , pp. 371-423.
	69	Preiss et al., 1973, "ADPG Synthetase and ADPG- α -Glucan 4 Glucosyl Transferase: Enzymes Involved in Bacterial Glycogen and Plant Starch Synthesis," <i>Anal. New York Acad. Sci.</i> , 210:265-278
	70	Preiss and Romeo, 1989, "Physiology, Biochemistry and Genetics of Bacterial Glycogen Synthesis," <i>Advances in Microbial Physiology</i> , 30:183-238.
	71	Russell et al., 1993, "Plasmid Targeting Of <i>E.coli</i> β -glucuronidase and ADP-glucose pyrophosphorylase in maize (<i>Zea mays</i> L.) cells" <i>Plant Cell Reports</i> 13:24-27.
	72	Sheehy et al., 1988, "Reduction of polygalacturonase activity in tomato fruit by antisense RNA" <i>Proc. Natl. Acad. Sci. USA</i> 85(23):8805-8809.
	73	Smith et al., 1989, "Evidence that the rb Locus Alters the Starch Content of Developing Pea Embryos through an Effect on ADP Glucose Pyrophosphorylase" <i>Plant Physiol.</i> , 89:1279-1284.
	74	Smith-White and Preiss, 1992, "Comparison of Proteins of ADP-Glucose Pyrophosphorylase from Diverse Sources," <i>J. Mol. Evol.</i> 34(5):449-464.
	75	Stark et al., 1992, "Regulation of the Amount of Starch in Plant Tissues by ADP Glucose Pyrophosphorylase" <i>Science</i> 258:287-292.
	76	Stitt et al., Academic Press: San Diego 1987, "Control of Photosynthetic Sucrose Formation" <i>The Biochemistry of Plants</i> , 10:328-409.
	*77	Stitt et al., 1995, "Regulation of Metabolism in Transgenic Plants" <i>Ann. Rev. Plant Physiol. Plant Mol. Biol.</i> 46:341-367.
	78	Sweetlove et al., 1996, "Characterization of transgenic potato (<i>Solanum tuberosum</i>) tubers with increased ADPglucose pyrophosphorylase" <i>Biochem. J.</i> 320:487-492.
	79	Vayda and Park, 1990 "The Molecular and Cellular Biology of the Potato" CAB International Table of Contents, First Edition (5 pages) and Belknap et al., eds., 1994, C.A.B. International: Wallingford, U.K. "The Molecular and Cellular Biology of the Potato" Table of Contents, Second Edition (5 pages).
	80	von Schaewen et al., 1990, "Expression of yeast-derived invertase in the cell wall of tobacco and <i>Arabidopsis</i> " <i>EMBO J</i> 9(10):3033-3044
	81	Wasemann et al., 1986, "The importance of the transit peptide and the transported protein for protein import into chloroplasts," <i>Mol. Gen. Genet.</i> 205:446-453.
✓	82	Witt, 1989, "Changes in Activity of Enzymes Involved in Carbohydrate Metabolism During Dediifferentiation of Mature Cells of <i>Riella helicophylla</i> (Bory et Mont) Mont." <i>J. Plant Physiol</i> 135:597-600.

EXAMINER INITIAL	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.	
DA	83	English Language Abstract of DE 41 24 537
	84	English Language Abstract of JP 5-153981
	85	English Language Abstract of JP 6-90767
	86	English Language Abstract of JP 7-227286

EXAMINER	<i>Deevid J</i>		DATE CONSIDERED	<i>6/8/65</i>
EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.				